

WE CLAIM:

1. A method of making a polarizable electrode for an electric double layer capacitor, comprising:

5       adding a binder assistant to a binder so that the binder is swollen and mixing a carbonaceous powder, a conductive assistant and thereafter the swollen binder, thereby obtaining a material mixture;

          kneading the material mixture into a primary forming  
10   material;

          forming the primary forming material into a secondary forming material; and

          rolling the secondary forming material into a sheet shape.

15       2. A method according to claim 1, wherein the binder assistant is added to the primary forming material and mixed immediately before the secondary forming material is formed.

3. A method of making a polarizable electrode for an electric  
20   double layer capacitor, comprising:

          a mixing step including a primary mixing in which a carbonaceous powder and a conductive assistant are mixed into a primary mixture and a secondary mixing in which a binder and a binder assistant are added to the primary mixture to be mixed  
25   into a material mixture;

          a kneading step in which the material mixture is kneaded into a primary forming material;

          a forming step in which the primary forming material is

formed into a secondary forming material; and

a rolling step in which the secondary forming material is rolled into a sheet shape.

5           4. A method according to claim 3, wherein the binder assistant is added to the binder before the secondary mixing so that the binder is swollen.

5. A method according to claim 3, wherein the binder  
10 assistant is added to the primary forming material and mixed immediately before the secondary forming material is formed.

6. A method according to claim 4, wherein the binder assistant is added to the primary forming material and mixed  
15 immediately before the secondary forming material is formed.

7. A method according to claim 1, wherein an amount of the binder assistant added to the binder in the mixing ranges from 70 to 130% of a mass of the binder.

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8. A method according to claim 4, wherein an amount of the binder assistant added to the binder in the mixing ranges from 70 to 130% of a mass of the binder.

25           9. A method according to claim 2, wherein an amount of the binder assistant added to the primary forming material ranges from 50 to 100% of a sum total mass of the carbonaceous powder, the conductive assistant and the binder.

10. A method according to claim 5, wherein an amount of the binder assistant added to the primary forming material ranges from 50 to 100% of a sum total mass of the carbonaceous powder, the conductive assistant and the binder.

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11. A method according to claim 2, wherein an amount of the binder assistant added to the binder in the mixing ranges from 70 to 130% of a mass of the binder, and an amount of the binder assistant added to the primary forming material ranges from 50  
10 to 100% of a sum total mass of the carbonaceous powder, the conductive assistant and the binder.

12. A method according to claim 5, wherein an amount of the binder assistant added to the binder in the mixing ranges from  
15 70 to 130% of a mass of the binder, and an amount of the binder assistant added to the primary forming material ranges from 50 to 100% of a sum total mass of the carbonaceous powder, the conductive assistant and the binder.

20 13. A method according to claim 6, wherein an amount of the binder assistant added to the binder in the mixing ranges from 70 to 130% of a mass of the binder, and an amount of the binder assistant added to the primary forming material ranges from 50 to 100% of a sum total mass of the carbonaceous powder, the  
25 conductive assistant and the binder.

14. A method according to claim 1, wherein the material mixture is kneaded by a kneader, and the kneader includes a

portion with which the material mixture is brought into contact during the kneading, and the material mixture is kneaded while a temperature of the portion of the kneader is controlled.

5           15. A method according to claim 3, wherein the material mixture is kneaded by a kneader, and the kneader includes a portion with which the material mixture is brought into contact during the kneading, and the material mixture is kneaded while a temperature of the portion of the kneader is controlled.

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          16. A method according to claim 11, wherein the material mixture is kneaded by a kneader, and the kneader includes a portion with which the material mixture is brought into contact during the kneading, and the material mixture is kneaded while  
15 a temperature of the portion of the kneader is controlled.

          17. A method according to claim 13, wherein the material mixture is kneaded by a kneader, and the kneader includes a portion with which the material mixture is brought into contact  
20 during the kneading, and the material mixture is kneaded while a temperature of the portion of the kneader is controlled.

          18. A method according to claim 2, wherein the primary forming material added with the binder assistant is mixed in a  
25 closed container.

          19. A method according to claim 5, wherein the primary forming material added with the binder assistant is mixed in a

closed container.

20. A method according to claim 16, wherein the primary  
forming material added with the binder assistant is mixed in a  
5 closed container.

21. A method according to claim 17, wherein the primary  
forming material added with the binder assistant is mixed in a  
closed container.